

## CURRICULUM VITAE

### KAREN JODAS

*Director: Savannah Environmental (Pty) Ltd  
Environmental Scientist (MSc, Pr.Sci.Nat)*

#### SKILLS BASE AND CORE COMPETENCIES

- Eleven (11) years experience in the environmental management and assessment field
- Nine (9) years experience in Project Management
- Project management of large environmental assessment & environmental management projects
- Experienced in the identification & assessment of potential environmental impacts & benefits
- Experienced in the development of practical & achievable mitigation measures & management plans, and evaluation of risk
- Experienced in the formulation of environmental strategy, policy & guidelines
- Working knowledge of environmental planning processes, policies, regulatory frameworks & legislation
- Experienced in the compilation and review of the reports in accordance with all relevant environmental legislation
- Wide range of experience for public and private sector projects - completed more than 50 environmental projects for a wide variety of Clients
- Experienced in undertaking public participation processes for a variety of projects
- Completed projects in all nine Provinces of South Africa, as well as Zambia and Lesotho
- *Specialisation:* Strategic environmental assessment and advice; Project Management and co-ordination of environmental projects; Environmental Management; Environmental Impact Assessment; Integration of environmental studies and environmental processes into larger engineering-based projects and ensuring compliance to legislation and guidelines; Hydrology and Water Management; General Ecology
- Registered Professional Natural Scientist (Registration No 400106/99)

#### TERTIARY EDUCATION

B.Sc Earth Sciences, majoring in Geography and Zoology, *Rhodes University, Grahamstown, 1993*

B.Sc Honours in Geography (in Environmental Water Management), *Rhodes University, Grahamstown, 1994*. Major subjects included Water Resources Management, Streams Ecology, Fluvial Geomorphology and Geographic Information Systems.

M.Sc in Geography (Geomorphology), *Rhodes University, Grahamstown, 1996*

Water Quality Management, *Potchefstroom University, 1998*

Environmental Law Course, *Aldo Leopold Institute, 2002*

#### EMPLOYMENT HISTORY

Nov 2006 – present: Savannah Environmental (Pty) Ltd: Director; Environmental Scientist

Oct 1997 – Oct 2005: Bohlweki Environmental (Pty) Ltd: Associate, Environmental Scientist

#### SELECTED RELEVANT PROJECT EXPERIENCE

- EIA and EMP for the proposed wind energy facility and associated infrastructure at a site within the Western Cape (Eskom Generation) – project management & report compilation
- Development of a comprehensive site-specific EMP for the construction and operation of the Eskom Braamhoek Integration Project, Free State and KwaZulu-Natal Provinces (Eskom Transmission) - project management & report compilation
- EIA and EMP for the proposed Steelpoort Integration Project, Mpumalanga & Limpopo Provinces (Eskom Transmission) – report compilation
- Environmental Scoping Study for a new coal-fired power station in the Lephalale area, Limpopo Province (Eskom Generation) – report compilation
- Detailed Environmental Scoping Study & public participation for the proposed Capacity Increase Project at Arnot Power Station, Mpumalanga Province (Eskom Generation) - report compilation
- Numerous EIAs for various electricity sector projects (generation, transmission & distribution) in all nine provinces of South Africa

**CURRICULUM VITAE**  
**BONGANI DARRYL KHUPE**

Profession : Environmental Consultant  
Specialisation : Environmental Management; Strategic environmental advice;  
Environmental compliance advice & monitoring; Environmental Impact Assessments  
Experience : Five (5) years in the environmental field

**SKILLS BASE AND CORE COMPETENCIES**

- Identification and assessment of potential negative environmental impacts and benefits through the review and manipulation of data and specialist studies
- Identification of practical and achievable mitigation and management measures and the development of appropriate management plans
- Compilation of environmental reports in accordance with relevant environmental legislative requirements
- Environmental compliance advice and monitoring
- Strategic and regional assessments; pre-feasibility & site selection
- Public participation processes for a variety of projects
- Working knowledge of environmental processes, policies, regulatory frameworks and legislation

**EDUCATION AND PROFESSIONAL STATUS**

***Degrees:***

B.Sc Honours Applied Environmental Science, University of Zimbabwe, 2004

***Courses:***

Introduction to SAMTRAC, NORSIA, 2010

Environmental Law Short Course, Rhodes University, 2011

Introduction to Windfarmer, GL Garrad Hassan, 2011

***Professional Society Affiliations:***

Professional Natural Scientist (Registration No 400375/11)

**PROJECT EXPERIENCE**

***Strategic and Regional Assessments***

- Strategic Site Selection for Nuclear power stations in South Africa (for Eskom Nuclear Division)

***Electricity Sector Projects***

- EIA for the proposed Oyster Bay Wind Energy Facility on a site near Oyster Bay, Eastern Cape Province (for Renewable Energy Systems)
- EIA and EMP for the proposed Wind Energy Facility at Kleinzee, Northern Cape Province (Eskom Holdings)
- EIA and EMP for the proposed PV Solar plant at De Aar, Northern Cape Province (for Solar Capital)
- EIA and EMP for the proposed PV Solar plant at De Aar, Northern Cape Province (for INCA Energy)
- EIA for the proposed Spitskop Wind Energy Facility on a site near Riebeeck East, Eastern Cape Province (for Renewable Energy Systems)
- EIA and EMP for the proposed Ramphela PV solar energy facility on a site near Ritchie, South of Kimberley, Northern Cape Province (Solar Capital)
- Basic Assessment and EMP for the proposed RustMo1 PV Plant, Near Rustenburg, North West Province (Momentous Energy)
- Basic Assessment and EMP for the proposed RustMo2 PV Plant, Near Rustenburg, North West Province (Momentous Energy)
- EIA and EMP Proposed Hantam PV solar energy facility and associated infrastructure on a site north of Loeriesfontein, Northern Cape Province (Solar Capital)
- EIA and EMP Proposed Kabi Vaalkop Solar PV facility on a site near Orkeney, North West Province (Kabi Solar)
- EIA and EMP Proposed Kabi Witkop Solar PV facility on a site near Orkeney, North West Province (Kabi Solar)
- ISS Power Plant Project on a site near Bethal, Mpumalanga Province (ISS Global)
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## **CURRICULUM VITAE**

### **DAVID HOARE**

Profession : Ecologist  
Specialisation : Ecology  
Years experience : 15

#### **SKILLS BASE AND CORE COMPETENCIES**

- Vegetation description and ecology, primarily in grasslands, thicket, savanna, fynbos, coastal systems and wetlands
- Plant biodiversity and threatened species surveys
- Fauna threatened species assessments
- Remote sensing and mapping of vegetation
- Specialist environmental impact assessments

#### **TERTIARY EDUCATION**

- 1991 – 1993: BSc (Botany, Zoology), Rhodes University
- 1994: BSc Hons (Botany), Rhodes University
- 1995 - 1997: MSc (Botany), University of Pretoria
- 2001 – 2010 PhD (Botany), Nelson Mandela Metropolitan University

#### **EMPLOYMENT HISTORY**

- February 1998 - November 2004: Researcher, Agricultural Research Council, Range & Forage Institute
- January 2009 - June 2009: Lecturer, University of Pretoria
- December 2004 – present: Specialist consultant, David Hoare Consulting cc

#### **SELECTED RELEVANT PROJECT EXPERIENCE**

- Specialist ecological study on the potential impacts of the proposed Upington Solar Energy Facility Project, Upington, 2010, Northern Cape
- Specialist ecological study on the potential impacts of the proposed Riverbank Wind Energy Facility Project, Humansdorp, 2010, Eastern Cape
- Specialist ecological study on the potential impacts of the proposed Wag'nbietjiespan Solar Energy Facility Project, Boshoff, 2010, Free State
- Specialist ecological study on the potential impacts of the proposed Pofadder Solar Energy Facility Project, Pofadder, 2010, Northern Cape
- Specialist fauna study on potential impacts of the proposed Klipheuwel / Dassiesfontein Wind Energy Facility Project, Caledon, 2010, Western Cape
- Specialist ecological study on the potential impacts of the proposed Kathu and Sishen Solar Energy Facility Project, Kathu, 2010, Northern Cape
- Specialist ecological study on the potential impacts of the proposed Happy Valley Wind Energy Facility Project, Humansdorp, 2010, Eastern Cape
- Specialist fauna study on potential impacts of the proposed Exxaro West Coast Wind Energy Facility Project, Bitterfontein, 2010, Western Cape
- Specialist fauna study on potential impacts of the proposed West Coast One Wind Energy Facility Project, Vredenburg, 2010, Western Cape
- Specialist fauna study on potential impacts of the proposed Rhebokfontein Wind Energy Facility Project, Darling, 2010, Western Cape
- Specialist ecological study on the potential impacts of the proposed Suurplaats Wind Energy Facility Project, Sutherland, 2010, Western Cape

**CURRICULUM VITAE**  
**JOHAN VAN DER WAALS**

Profession : Soil Scientist  
Years experience : 13 years

**TERTIARY EDUCATION**

- 1995: BSc (Soil Science and Botany), Potchefstroom University
- 1999: BSc Hons (Soil Science and Plant Nutrition), University of Pretoria
- 2001: MSc (Soil Science and Plant Nutrition), University of Pretoria
- 2006: PhD (Soil Science), University of Pretoria

**PROFESSIONAL REGISTRATION**

- Soil Science Society of South Africa
- South African Soil Surveyors Organisation
- South African Council for Natural Scientific Professions – Reg. no. 400160/08

**EMPLOYMENT HISTORY**

- 1999 – 2007: Department of Plant Production and Soil Science, University of Pretoria
- Establishment of Terra Soil Science CC

**SELECTED RELEVANT PROJECT EXPERIENCE**

- Van der Waals, J.H., & Claassens, A.S. 2002. Accurate lime recommendations under South African conditions. *Commun. Soil Sci. Plant Anal.*, 33(15-18), p 3059-3074
- Van der Waals, J.H., Snyman, H.G. & Claassens A.S. 2005. Increase in metal extractability after liming of sacrificial sewage sludge disposal soils. *Water SA* 31(2) p. 271-273
- Jackson, C.R., Lubbe, N.R., Robertson, M.P., Setsaas, T.H., Van der Waals, J. & Bennett, N.C. 2008. Soil properties and the distribution of the endangered Juliana's Golden Mole. *Journal of Zoology* 274(2008) 13-17
- Conference Proceedings Publications
- Van der Waals, J.H., Van der Merwe, C. & Erdmann, R. 2007. Detail assessment of metal distribution in polluted soil – a South African case study. In Fourie, A., Tibbett, M. & Wiertz, J. (Eds.), *Proceedings of the Second International Seminar on Mine Closure, Santiago, Chile, 16-19 October, 2007.* pp 8 5-820
- Snyman, H.G. & van der Waals, J.H. 2004. Laboratory and field scale evaluation of agricultural use of sewage sludge. WRC Report No. 1210/1/04. ISBN: 1- 77005-230-5, Water Research Commission, Pretoria

**CURRICULUM VITAE**  
**JOHAN ABRAHAM VAN SCHALKWYK**

Profession : Heritage Management Specialist  
Specialisation : Anthropology, Archaeology, and History  
Years experience : 34 years

**SKILLS BASE AND CORE COMPETENCIES**

- Impact assessments (archaeological, anthropological, and social) for various departments and companies in southern Africa
- Projects include roads, pipelines, power lines, power stations, dams, mining, water purification works, historical landscapes, refuse dumps and urban development's
- Include scoping, Phase 1 impact assessments as well as Phase 2 mitigation projects

**TERTIARY EDUCATION**

- 1976: BA, University of Pretoria
- 1978: BA Hons (Archaeology), University of Pretoria
- 1979: Post Graduate Diploma in Museum Science, University of Pretoria
- 1981: BA Hons (Anthropology), University of Pretoria
- 1985: MA (Anthropology), University of Pretoria
- 1996: D. Litt et Phil (Anthropology), UNISA

**EMPLOYMENT HISTORY**

- 1992 – present: Head of Department of Research, Museum of Cultural History, Pretoria
- 1978 - 1991: Curator of the Anthropological Department of the Museum of Cultural History, Pretoria
- 1976 - 1977: Assistant researcher, Department of Archaeology, University of Pretoria

**SELECTED RELEVANT PROJECT EXPERIENCE**

- Power lines: Mercury-Perseus, Mercury-Zeus, Tarlton-Westgate, Mmabatho-Watershed, Marathon-Gateway, Hendrina-Marathon, Spencer-Tabor, Boulders-Malelane
- Power stations: Medupi, Project Bravo, Waterberg Power Station, Vaal South, Komati Power Station Expansion

**PROFESSIONAL ACCREDITATION**

- Association for Southern African Professional Archaeologist: Principal Investigator for Iron Age, Colonial Period and Industrial Heritage, membership no.: 164

**CURRICULUM VITAE**  
**LOURENS MARTINUS DU PLESSIS**

Profession : Geographer,  
Specialisation : Environmental GIS  
Years experience : 17 years

**SKILLS BASE AND CORE COMPETENCIES**

- The application of computerised systems in environmental planning and management, impact assessments and spatial modelling
- Data Sourcing and Acquisition, data capture, data evaluation, data conversion & transfer, GIS database development, implementation & maintenance, spatial analysis (visibility, slope, aspect, etc.), digital elevation modelling, terrain evaluation, image processing, impact assessment and impact management, environmental management, decision support systems interface development, map production, display, queries & reporting
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**TERTIARY EDUCATION**

- 1993: BA (Geography and Anthropology), University of Pretoria

**EMPLOYMENT HISTORY**

- April 1990 – September 1997: Project Manager GisLAB CC
- October 1997 – October 1999 Project Manager, GISBS
- November 1999 – present: Director, MetroGIS (Pty) Ltd

**SELECTED RELEVANT PROJECT EXPERIENCE**

- Visual Impact Assessments and viewshed analyses for various types of developments, including telecommunication structures, mining activities, renewable energy facilities and tourism accommodation in National Parks and other environmentally sensitive areas, some recent or current projects include:
  - Environmental Management Frameworks (EMF) for South Africa at a provincial (1:250 000) scale
  - Spatial Development Initiatives (SDI) for Lubombo SDI, Coega Industrial Development Zone, West Coast SDI and Wild Coast SDI
  - EMF's (Digital Decision Support Systems) at local council scale for Hennops River, Centurion, Windhoek, the Alexandra Renewal Project, Siyanda District Municipal area, Ekurhuleni, etc
  - Gauteng Open Space Project (GOSP) GIS-based open space planning for the Gauteng Province.
  - Gauteng Communication Strategy (GAUCONS) environmental control zones to regulate the construction of telecommunication masts
  - SEA (Strategic Environmental Assessments) for Faerie Glen Nature Reserve and Rustenburg Municipality (Priority Area 1)
  - Environmental Impact Assessments (EIA) the utilisation of GIS based systems to determine and manage environmental impacts. Various projects all over South Africa
  - GIS services for the Limpopo National Park (Trans-frontier Peace Park) in Mozambique
  - Gauteng Supplementation and Implementation of EIA Regulations Project

## **CURRICULUM VITAE**

### **SHAWN JOHNSTON**

*Sustainable Futures ZA*

*Process Facilitator*

#### **SKILLS BASE AND CORE COMPETENCIES**

- Facilitator, Mediator and Trainer
- Planning, Process Design and Conceptualising
- Facilitation, Public and Stakeholder Liaison
- Process Coordination, Problem Solving and Negotiation Skills

#### **TERTIARY EDUCATION**

- B.Tech Environmental Management – Cape Peninsula University of Technology, Cape Town
- National Diploma in Horticulture – Cape Technikon, Cape Town
- Certificate in Conflict Resolution and Environmental Mediation – Partnership Lifeskills Centre/Global FutureLinks – Washington DC, USA

#### **EMPLOYMENT HISTORY**

- Leadership South Programme
- FutureLinks South Africa
- Common Ground Consulting
- Sustainable Futures ZA

#### **SELECTED RELEVANT PROJECT EXPERIENCE**

- **LEAD FACILITATOR, OLIFANTS/DORING RIVER WATER USER ASSOCIATION CAPACITY BUILDING PROJECT. (Current)** Acting as the lead facilitator and co-ordinator of the Olifant/Doring Water User Association Capacity Building for commercial farmers and emerging black farmers.
- **ESKOM PROCESS FACILITATOR, ESKOM ANKERLIG CLOSED CYCLE GAS TURBINE CONVERSION PROJECT AND ASSOCIATED PROJECTS, ATLANTIS – CAPE TOWN (Current)** Responsible for facilitating the public participation process for the Eskom Ankerlig gas turbine conversion from OCGT to CCGT and associated EIA studies relating to Ankerlig Power Station in Atlantis, Cape Town.
- **ESKOM PUBLIC PARTICIPATION PROCESS, ESKOM WIND ENERGY FACILITY, WEST COAST OF SOUTH AFRICA (Current)** Responsible for facilitating the public participation process for the EIA process of the proposed Eskom Wind Energy Facility near Koekenaap in the Matzikama Municipality on the Cape West Coast.
- **PART-TIME LECTURER, WATER AND CONFLICT, INTEGRATED WATER RESOURCES MANAGEMENT PROGRAMME AT THE UNIVERSITY OF THE WESTERN CAPE WESTERN CAPE (UWC) (2006 - Current)** Assisted with establishing the first Water and Conflict Resolution module in the M.Sc Integrated Water Resources Management degree course.

# CURRICULUM VITAE

## TONY BARBOUR

*Environmental Consultant and Researcher*

### SKILLS BASE AND CORE COMPETENCIES

- Eighteen (18) years experience in the field of environmental management
- Undertaken in the region of 20 SIAs throughout South Africa
- Author of the Guidelines for Social Impact Assessments for EIAs commissioned by the Department of Environmental Affairs and Development Planning (DEA&DP) in the Western Cape
- Developed SIA Guidelines for the Department of Water Affairs and Forestry
- Work experience in South Africa, Namibia, Botswana, Zambia, Lesotho and Swaziland

### TERTIARY EDUCATION

BSc (Geology and Economics) Rhodes, 1984

BEcon (Hons) Rhodes, 1985

MSc (Environmental Science) University of Cape Town, 1992

### EMPLOYMENT HISTORY

Private Consultant: November 2004-current.

University of Cape Town: August 1996-October 2004

Environmental Evaluation Unit (EEU), University of Cape Town. Senior Environmental Consultant and Researcher.

1991-1996: Ninham Shand Consulting (Cape Town). Senior Environmental Scientist.

1996-August 2000: Steffen, Robertson and Kirsten (SRK Consulting) – Associate Director, Manager Environmental Section, SRK Consulting, Cape Town.

Lecturing: 1990-current

- University of Cape Town: Environmental Economics, Social Impact Assessment, Strategic Environmental Assessment and Environmental Impact Assessment.
- Cape Technikon: Environmental Economics and Waste Management.
- Peninsula Technikon: Environmental Economics and Waste Management.

### SELECTED RELEVANT PROJECT EXPERIENCE

- Social Assessment for Darling Wind Farm, Western Cape, South Africa (2001 – 2002)
- Portnet Saldanha, Western Cape, SA. EIA for the expansion of a bulk iron ore export facility at the Port of Saldanha (2000)
- Social Assessment for road up-grade between Gansbaai and Bredadorp, Southern Cape (2005).
- Social Assessment Zeekoevlei Golf Estate, Somerset West, Western Cape (2005)
- Social Assessment Silwersand Golf and Resort Estate, Robertson, Western Cape (2003).
- Social Assessment for Valkenberg East Site, Cape Town (2003)
- Development of Social Impact Assessment Guidelines for the Western Cape DEA&DP (2006)
- Social Assessment for Riversonderend Road By-pass (1991)
- Internal Review Consultant for Golder Associates on Namakwa Sands Heavy Mineral Mining EIA, Western Cape (current)
- Review of EIA for Zeekoevlei Golf Course Estate, Somerset West, Western Cape (2005);
- Review of EIA for Oostenberg Waste Transfer Station, Brackenfell, Western Cape (2004);
- Review of EIA for N7 Road Up-grade, Clanwilliam, Western Cape (2002)